

**2021**  
**Town of Victoria Waterworks**  
**Annual Drinking Water Quality Report**

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. We use three surface water sources to supply our customers with treated filtered water. They are the Nottoway River, Lunenburg Lake, and Modest Creek.

I'm pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact either Rodney Newton, Town Manager at 434-696-2343 or Phil Pegram, Waterworks Operator at 434-696-2410. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Town Council meetings. They are held on the second Tuesday of each month at 7:00 pm at the Town Office located at 1809 Main Street.

The Town of Victoria Waterworks routinely monitors for constituents in your drinking water according to Federal and State laws. The table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2021. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

*Action Level (AL)*- the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*Treatment Technique (TT)* - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level* - (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal - (mandatory language)** The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

<b>TEST RESULTS</b>						
Contaminant / unit of measurement	Violation Y/N	Level Detected	Sample Date	MCLG	MCL	Likely Source of Contamination
<b>Organic and Microbiological Contaminants</b>						
Total Coliform Bacteria	N	None detected in 2021	Monthly	0	presence of coliforms in no more than one sample each month	Naturally present in the environment
Turbidity / NTU	N	Average= 0.04 Range= 0.03 to 0.07	Daily	n/a	TT = 5NTU & TT = 95% of samples less than 0.5 NTU	Soil runoff
TOC [Total Organic Carbon]	N	Average= 1.35mg/l Range= 1.18 1.38mg/l	Monthly	0	Annual average removal ratio of 1.0 minimum	Rotting organic matter- tree leaves, etc.
<b>Radioactive Contaminants</b>						
Alpha emitters / pCi/L	N	<0.2	April 2018	0	15	Erosion of natural deposits
Radium /piCu/L	N	0.1	April 2018	0	5 piCu/L	Erosion of natural Deposits
<b>Inorganic Contaminants</b>						
Copper / ppm	N	3.23 = 90 <sup>th</sup> percentile, range =<0.20 to 7.74, of 10 samples	August 2020	1.3	AL=15	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride / ppm	N	Average = .729 range = 0.474 to 0.981 mg/L	Daily	4	4	Water additive which promotes strong teeth
Lead / ppb	N	.00323=90 <sup>th</sup> percentile, Range=<.002to.00774 ppm,of 10 samples	August 2020	0	AL=0.015	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate / ppm	N	<0.05	April 2020	0	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Disinfection By-Products</b>						
TTHM / ppb [Total trihalomethanes]	N	Average= 0.65mg/L Range= 0.030-0.13mg/l	Quarterly	0	0.080 mg/L (Annual average)	By-product of drinking water chlorination
HAA5 [Haloacetic acid]	N	Average= 0.050mg/l Range=0.040 0.068mg/l	Quarterly	0	0.060mg/l (Annual Average)	By-product of drinking water Chlorination
<b>METALS</b>						
Sodium	N	21.5 mg/L	Annual April 2021	0	20 mg/L	Erosion of natural deposits

Arsenic	N	Average <0.002 Range= <0.002	April 2020	0	<0.010 ppm	Natural deposits in the earth, soil, rocks & ground or industrial & agricultural pollution	
Barium	N	0.027 mg/l	April 2020	2 MCLG mg/l	2 MCL mg/l	Found in naturally occurring mineral deposits & alkaline earth metal	

Most of the results in this table are from testing done in 2021 with the exception of radiological in 2018. Lead and copper in August 2020. However, the State allows us to monitor for some contaminants less than once a year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than a year old. We constantly monitor for various contaminants to meet all regulatory requirements. The table lists only those contaminants that had some level of detection other contaminants were either not present or below the detection limits of the laboratory equipment.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some drinking water constituents you may be interested in are as follows:

**COLIFORMS:** are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that are found.

**TTHMs:** [Total Trihalomethanes] & **HAA5s** [Haloacetic Acid Five] Some people who drink water containing trihalomethanes and haloacetic acids in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

**Cryptosporidium-** Testing was conducted on our raw water source for 24 consultative months. This was required by EPA. Cryptosporidium may be found in soil, food or recreational waters and swimming pools. It can be spread by feces from infected humans or animals. Source waters may become contaminated by run-off from heavy rains from farm lands. The Virginia Department of Health has reviewed the data and calculated the arithmetic mean Cryptosporidium concentration, as required by the Long Term 2 Enhanced Surface Water Treatment Rule (LT2

Rule) The laboratory results is 0.073 oocysts per liter. According to the LT2 Rule Bin Classification Table, our waterworks shall retain the Bin 1 classification meaning results were <0.075 oocysts per Liter. In compliance with the LT2 Rule.

**Lead:** "If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Victoria Water Works is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 15 to 30 seconds or until it becomes cold and reaches a steady temperature before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>." Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

A source water assessment of our system was conducted in 2014 by the Virginia Department of Health. Our reservoirs were determined to be of high susceptibility to contamination using the criteria developed by the state in its approved Source Water Assessment Program. The assessment report consists of maps showing the source water assessment areas, an inventory of known land use activities of concern and documentation of any known contamination within the last 5 years. The report is available by contacting your Town Manager 434-696-2343 or Water Works supervisor 434-696-2410 at the listed telephone numbers.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

Please call our office if you have questions.(434)696-2343

We at the Town of Victoria Waterworks work to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.